

Features of an Ergonomic Chair

In order to help make sure you choose a chair with all the necessary adjustments, we will break the chair down into components:

I. Casters and Base

Use a chair with casters and a 5-point base to ease movement and minimize possible tipping. Generally, nylon carpet casters are standard, but soft wheel casters are available for hard surfaces such as linoleum. Rubber locking casters are useful on stools to prevent tipping.

II. Seat Pan

The seat pan is the component of the chair that supports the majority of the user's weight. It is important to purchase a chair which uses dense, small-cell foam padding or spring coils to retain its support and cushioning (this usually involves purchasing a chair over \$250.00). The front part of the seat should *slope down slightly* (waterfall design) and allow a fist size gap between the back of the knees and the front edge of the seat pan to reduce pressure at the back of the thighs. *Tilt adjustments* are preferred to allow a slight forward or reclined working posture to be attained. A seat pan with a *sliding mechanism* is also a beneficial feature. This allows small and tall users to adjust the distance from the back rest.

III. Backrest

Adequate lumbar support is the most crucial element of a backrest. The backrest should either be small enough to fit into the small of the back, clearing the pelvis and back of the rib cage, or curved to provide adequate support. Many chairs come with a built-in lumbar adjustment which can be adjusted by turning a knob on the back of the chair and then raising the backrest to a comfortable position. Inadequate lumbar support places excess pressure on the spine. Remember, a lumbar support cushion properly placed with the fullest part of the support behind the small of the back (belt-line) can help to accentuate lumbar support. The backrest should also have *angle, in-out, and height adjustments* to achieve proper spinal alignment. The *angle adjustment* allows the user to adjust the angle of the back rest relative to the seat pan, as opposed to the *tilt mechanism*, which moves the seat pan with the backrest. When you change the tilt, the angle between the seat pan and the backrest stays the same.

IV. Armrests

Height and width adjustments are absolutely necessary when purchasing a chair with armrests. The armrest should be made of a soft material and should be at least 2" wide to provide adequate surface area.

V. Seat Height

Almost all task chairs come with a hydraulic seat height adjustment. This is probably the single most important adjustment mechanism on a chair. It allows the user to adjust the chair so their feet can rest properly on the floor or footrest and the upper body is properly aligned with the computer monitor and input devices such as the keyboard and mouse.

VI. Chair Recline or Tilt

The chair recline or tilt adjustment changes the angle of the entire seat relative to the floor. As with backrest angle adjustability, a reclined chair transfers some of the upper body weight to the backrest of the chair. It is also important that the user change body positioning throughout the day.

It is always important to try out or “test-drive” a chair before you purchase a chair in order to determine individual comfort.

Chair Adjustments

THE CHAIR IS THE STARTING POINT FOR A PROPERLY DESIGNED WORK STATION. IMPORTANT CHARACTERISTICS INCLUDE EASE OF ADJUSTABILITY AND ADEQUATE LUMBAR AND THORACIC SUPPORT (LOWER AND MID-BACK).

HELPFUL HINTS:

- READ THE INSTRUCTIONS THAT COME WITH YOUR CHAIR.
- Experiment with the various control features (it will not break the chair).
- Find the height adjustment feature and begin:
 - Raise yourself as high as the chair will allow.
 - Slowly lower yourself down so that your feet are firmly placed on the floor.
 - In this position, your hips should be slightly higher than your knees.
- Find the seatpan angle feature:
 - Most people prefer the seatpan to be adjusted parallel with the floor.
- Find the height adjustment feature for the chair-back:
 - Adjust the chair-back to support your lumbar spine (fullest part of the support at your belt-line).
 - Adjust the angle of the back to allow for an upright posture. Some people prefer a slight backward angle.
- Find the arm adjustment features and place them into their lowest setting.
 - While you are sitting in the chair, relax your shoulders and arms down to your side.
 - Slowly raise the arm supports until you can gently rest your elbows and forearms. Do not allow your shoulders to raise upward.

Thank you for taking time to adjust your chair!!

As you feel more comfortable with the adjustment features, change your position periodically throughout your day which will enhance bloodflow and reduce stress to the muscles in your body.

Information Resources

For information regarding available chair styles and ordering information or to try out different chair models, contact the following:

Leased space facilities

Real Property and Space Management Activity	404-371-5450
---	--------------

Owned facilities (Atlanta area)

Design Construction and Management Office	404-639-0346
---	--------------